

Amendments to the Claims:

Please amend claims 1, 5, 9 and 14 as shown in the following list of claims. This listing of claims will replace all prior versions, and listings, of claims in the application.

1. (currently amended) A communication station adapted for contactless communication with transponders and with further communication stations, comprising:
 - first protocol-executing means configured to function according to station-transponder protocol, the first protocol-executing means being configured to effect communication between the communication station and at least one transponder while observing the station-transponder protocol;
 - second protocol-executing means configured to function according to a station-station protocol that differs from the station-transponder protocol in respect of at least one protocol parameter, the second protocol-executing means being configured to effect communication between the communication station and at least one further communication station while observing the station-station protocol;
 - first signal-processing means electrically connected to the first protocol-executing means, the first signal-processing means being configured to code signals using only Miller code and decode signals using only Manchester code for contactless station-transponder communication, the first signal-processing means being further configured to modulate and demodulate the signals for the contactless station-transponder communication;
 - second signal-processing means electrically connected to the second protocol-executing means, the second signal-processing means being configured to code and decode signals for contactless station-station communication, the second signal-processing means being further configured to modulate and demodulate the signals for the contactless station-station communication, the second signal-processing means being configured to code and decode the signals

26 using one of a non-return-to-zero code and an FM zero code for the contactless
27 station-station communication; and

28 transmission means electrically connected to the first and second signal-
29 processing means to transmit and receive the signals for the contactless station-
30 transponder communication and the signals for the contactless station-station
31 communication to and from the first and second signal-processing means, the
32 transmission means being configured to receive and transmit electromagnetic
33 signals for contactless communication with the transponders and the further
34 communication systems.

1 2. (previously presented) A communication station as claimed in claim 1,
2 wherein the first protocol-executing means have energy-supply signal generating
3 means that are configured to generate an energy-supply signal each time the
4 handling of the station-transponder protocol starts, and wherein the second
5 protocol-executing means have synchronizing-signal generating means that are
6 configured to generate a synchronizing signal each time the handling of the
7 station/station protocol starts.

1 3. (previously presented) A communication station as claimed in claim 1,
2 wherein the station-station protocol is operative to cause a minimal energy
3 consumption at the communication station when communicating with the at least
4 one further communication station.

1 4. (previously presented) A communication station as claimed in claim 1,
2 wherein the first protocol-executing means are configured to function according to
3 the station-transponder protocol that is configured to communicate with a plurality
4 of transponders, and wherein the second protocol-executing means are configured
5 to establish a communication connection to a plurality of communication stations.

1 5. (currently amended) An integrated circuit for a communication station for
2 contactless communication with transponders and with further communication
3 stations, comprising:

4 first protocol-executing means configured to function according to a
5 station-transponder protocol, the first protocol-executing means being configured
6 to effect communication between the communication station and at least one
7 transponder while observing the station-transponder protocol;

8 second protocol-executing means configured to function according to a
9 station-station protocol that differs from the station-transponder protocol in
10 respect of at least one protocol parameter, the second protocol-executing means
11 being configured to effect communication between the communication station and
12 at least one further communication station while observing the station-station
13 protocol;

14 first signal-processing means electrically connected to the first protocol-
15 executing means, the first signal-processing means being configured to code
16 signals using only Miller code and decode signals using only Manchester code for
17 contactless station-transponder communication, the first signal-processing means
18 being further configured to modulate and demodulate the signals for the
19 contactless station-transponder communication;

20 second signal-processing means electrically connected to the second
21 protocol-executing means, the second signal-processing means being configured
22 to code and decode signals for contactless station-station communication, the
23 second signal-processing means being further configured to modulate and
24 demodulate the signals for the contactless station-station communication, the
25 second signal-processing means being configured to code and decode the signals
26 using one of a non-return-to-zero code and an FM zero code for the contactless
27 station-station communication; and

28 a terminal electrically connected to the first and second signal-processing
29 means to transmit and receive the signals for the contactless station-transponder
30 communication and the signals for the contactless station-station communication
31 to and from the first and second signal-processing means, the terminal being
32 configured to be connected to transmission means for contactless communication
33 with the transponders and the further communication systems.

1 6. (previously presented) An integrated circuit as claimed in claim 5, wherein
2 the first protocol-executing means have energy-supply signal generating means

3 configured to generate an energy-supply signal each time the station-transponder
4 protocol starts, and wherein the second protocol-executing means have
5 synchronizing-signal generating means that are configured to generate a
6 synchronizing signal each time the handling of the station-station protocol starts.

1 7. (previously presented) An integrated circuit as claimed in claim 5, wherein
2 the station-station protocol is configured to minimize energy consumption at the
3 communication station when communicating with the at least one further
4 communication station.

1 8. (previously presented) An integrated circuit as claimed in claim 5, wherein
2 the first protocol-executing means are operative to function according to the
3 station-transponder protocol, which is adaptive to communicate with a plurality of
4 transponders, and wherein the second protocol-executing means are configured to
5 establish a communication connection to a plurality of communication stations.

1 9. (currently amended) A communication system adapted for contactless
2 communication, comprising:
3 a plurality of transponders;
4 a plurality of communication stations, each comprising:
5 a microprocessor configured to execute a station-transponder
6 protocol for contactless station-transponder communication with at least one of
7 the transponders and a station-station protocol for contactless station-station
8 communication with at least one of the communication stations, wherein the
9 station-station protocol differs from the station-transponder protocol by at least
10 one protocol parameter, the microprocessor being further configured to code
11 signals using only Miller code and decode signals using only Manchester code for
12 the contactless station-transponder communication and to code and decode signals
13 for the contactless station-station communication, the microprocessor being
14 further configured to modulate and demodulate the signals for the contactless
15 transponder communication and to modulate and demodulate the signals for the
16 contactless station communication, the microprocessor being configured to code

17 and decode the signals using one of a non-return-to-zero code and an FM zero
18 code for the contactless station-station communication; and
19 transmission means electrically connected to the microprocessor to
20 transmit and receive the signals for the contactless station-transponder
21 communication and the signals for the contactless station-station communication
22 to and from the microprocessor, the transmission means being configured to
23 receive and transmit electromagnetic signals for contactless communication with
24 the transponders and the communication systems.

1 10. (canceled).

1 11. (previously presented) A communication system as claimed in claim 9,
2 wherein each of the transponder is an RF tag.

1 12. (previously presented) A communication system as claimed in claim 9,
2 wherein the microprocessor is configured to generate an energy-supply signal.

1 13. (previously presented) A communication system as claimed in claim 9,
2 wherein the microprocessor is configured to generate a synchronizing signal.

1 14. (currently amended) A communication station adapted to communicate
2 with a plurality of transponders, comprising:
3 a microprocessor configured to execute a station-transponder protocol for
4 contactless station-transponder communication with at least one of the
5 transponders and a station-station protocol for contactless station-station
6 communication with other communication stations, wherein the station-station
7 protocol differs from the station-transponder protocol by at least one protocol
8 parameter, the microprocessor being further configured to code signals using only
9 Miller code and decode signals using only Manchester code for the contactless
10 station-transponder communication and to code and decode signals for the
11 contactless station-station communication, the microprocessor being further
12 configured to modulate and demodulate the signals for the contactless station-
13 transponder communication and to modulate and demodulate the signals for the

14 contactless station-station communication, the microprocessor being
15 configured to code and decode the signals using one of a non-return-to-zero code
16 and an FM zero code for the contactless station-station communication; and
17 transmission means electrically connected to the microprocessor to
18 transmit and receive the signals for the contactless station-transponder
19 communication and the signals for the contactless station-station communication
20 to and from the microprocessor, the transmission means being configured to
21 receive and transmit electromagnetic signals for contactless communication with
22 the transponders and the other communication systems.

1 15. (previously presented) A communication station as claimed in claim 14,
2 wherein each of the transponders is an RF tag.

1 16. (previously presented) A communication station as claimed in claim 14,
2 wherein the microprocessor is configured to generate an energy-supply signal.

1 17. (previously presented) A communication system as claimed in claim 14,
2 wherein the microprocessor is configured to generate a synchronizing signal.

1 18. (previously presented) A communication station as claimed in claim 1,
2 wherein the second signal-processing means is configured to code and decode the
3 signals using the FM zero code for the contactless station-station communication.

1 19. (previously presented) A communication station as claimed in claim 1,
2 wherein the second signal-processing means is configured to code and decode the
3 signals using the non-return-to-zero code for the contactless station-station
4 communication.

1 20. (previously presented) A communication station as claimed in claim 1,
2 wherein the transmitting means includes a transmission coil electrically connected
3 to the first and second signal-processing means to transmit and receive the signals
4 for the contactless station-transponder communication and the signals for the

5 contactless station-station communication to and from the first and second signal-
6 processing means.